

## AMENDMENTS TO THE CLAIMS

1. (Original) A cathode, said cathode formed by a cylindrical hollow part closed at a first end and open at the opposed end in which on at least an outer or inner portion of said cylindrical surface includes a layer of getter material.
2. (Original) The cathode as recited in claim 1, wherein said cylindrical hollow part is made essentially of metal.
3. (Original) The cathode according to claim 2, wherein said metal includes material chosen from among the group consisting of nickel, molybdenum, tantalum and niobium.
4. (Original) The cathode as recited in claim 1, wherein said layer of getter material is formed of a metal selected among the group consisting of: titanium, vanadium, yttrium, zirconium, niobium, hafnium and tantalum.
5. (Original) The cathode as recited in claim 1, wherein said layer of getter material is an alloy that includes zirconium or titanium combined with one or more elements selected among the group of transition metals and aluminum.
6. (Original) The cathode as recited in claim 1, wherein said getter layer is formed by cathodic deposition.

7. (Original) The cathode as recited in claim 1, wherein said getter layer is formed by electrophoretic deposition.

Claims 8-14 (Cancelled).

15. (Original) The cathode as recited in claim 1, wherein said layer of getter material is less than 20 microns thick.

Claim 16 (Cancelled).